SOUTHERN CALIFORNIA ASSOCIATION of GOVERNMENTS

Comprehensive Regional Goods Movement Plan and Implementation Strategy

East-West Freight Corridor Update

FREIGHTWORKS
SOUTHERN CALIFORNIA DELIVERS THE GOODS

Plans and Programs TAC

August 10, 2011

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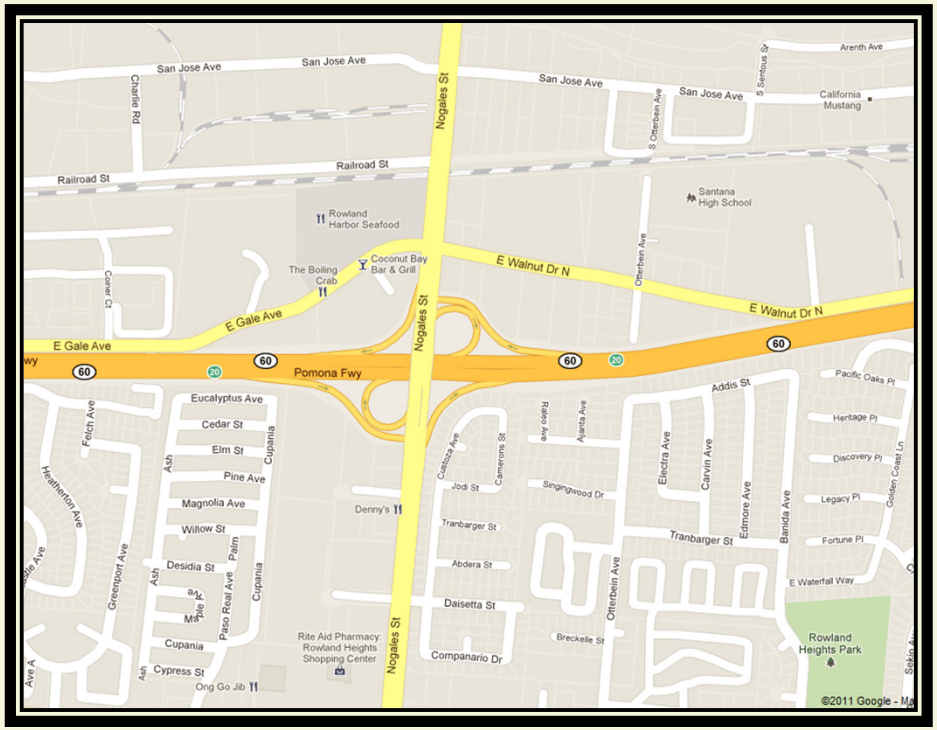
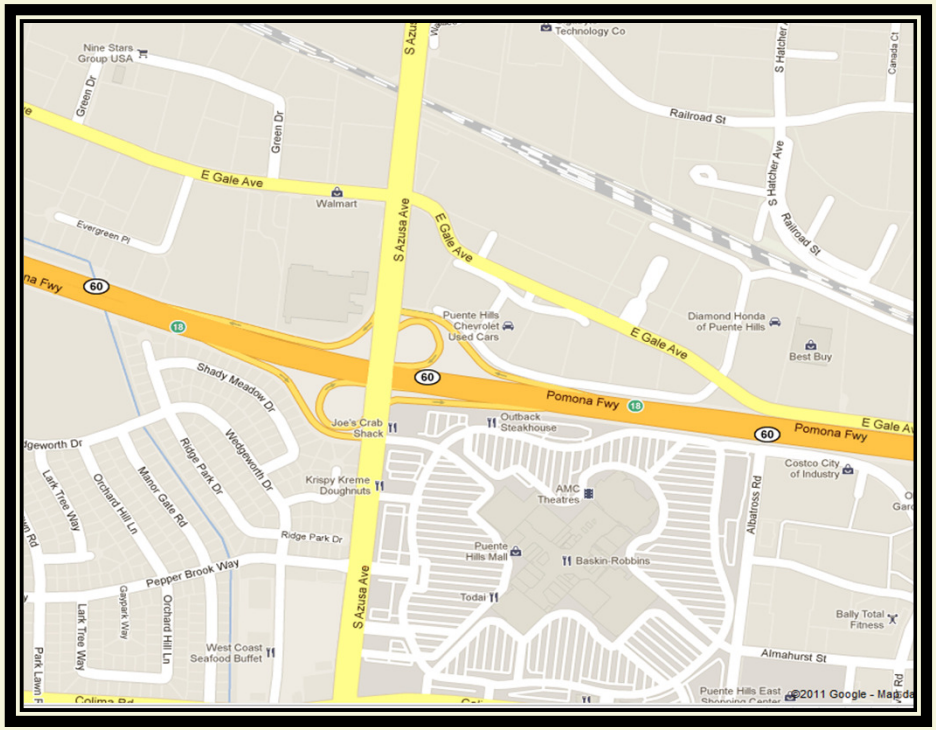
Truck Traffic Conditions on SR-60

EB-60 east of Nogales St. (PM)
May, 12, 2011



WB-60 west of Azusa Avenue (AM)
May, 12, 2011



Consequences of “doing nothing”

- High levels of truck traffic on general purpose lanes (more congestion, accidents, constrained economic development)
- High potential for increased truck involved incidents

Freight Corridor Objective

- Build upon foundations of the Multi-County Goods Movement Action Plan and 2008 Regional Transportation Plan Goods Movement Element
  - Identify most promising EW Alignment
  - Formulate a pragmatic approach to incentivize zero or near-zero emission trucks
  - Estimate costs and benefits and policy options
  - Evaluate funding options.

Criteria to identify most promising alignment

- Proximity to warehousing and manufacturing
- Right-of-way constraints
- Traffic impacts
- Community impacts and political acceptance
- Cost and financial feasibility
- Impact on other planned projects (including rest of regional truck lane system)

Warehouse Square Footage within 5.0 Miles of Preliminary Alternative East-West Freight Corridors

(I-710: 153.5 mil square feet, 15% of regional total)

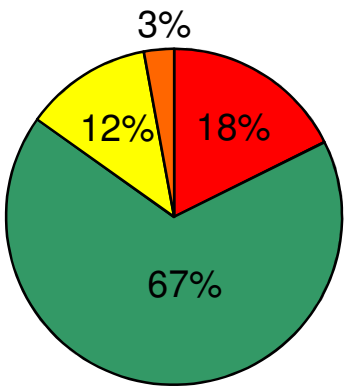
	Total Square Feet (mil)	Percent of Regional Total
SR-60	509.9	50%
UP Line	533.4	52%
SCE Line	291.5	29%
I-10	442.9	43%
SR-91	188.9	18%
I-605	106.2	10%
I-15	203.8	20%
I-105	78.4	8%

Manufacturing Employment within 5.0 Miles of Preliminary Alternative East-West Freight Corridors

(I-710: 143,312, 17.0% of regional total)

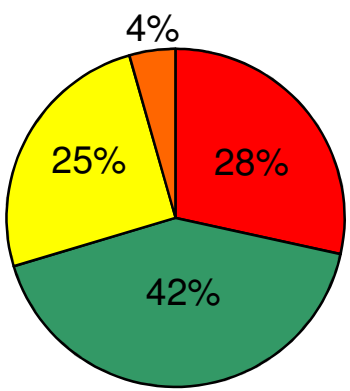
	Total Manufacturing Employment	Percent of Regional Total
SR-60	226,886	26.9%
UP Line	237,756	28.2%
I-10	156,046	18.5%
SR-91	165,976	19.7%

ROW Impact Assessment

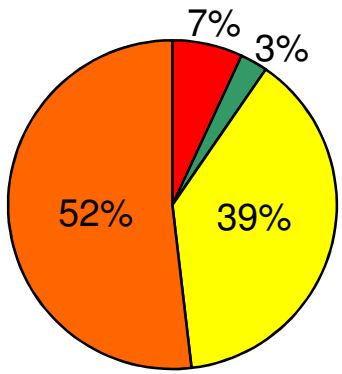


Green: Footprint located or contained within public, transportation (Caltrans) rights of way.

Red: Residential impacts (partial or full parcel), and land impacts to potential 4f-type or 404-type, or Section 106-type properties (e.g., parks, schools, natural water courses or habitat, landfill, or historic property.)

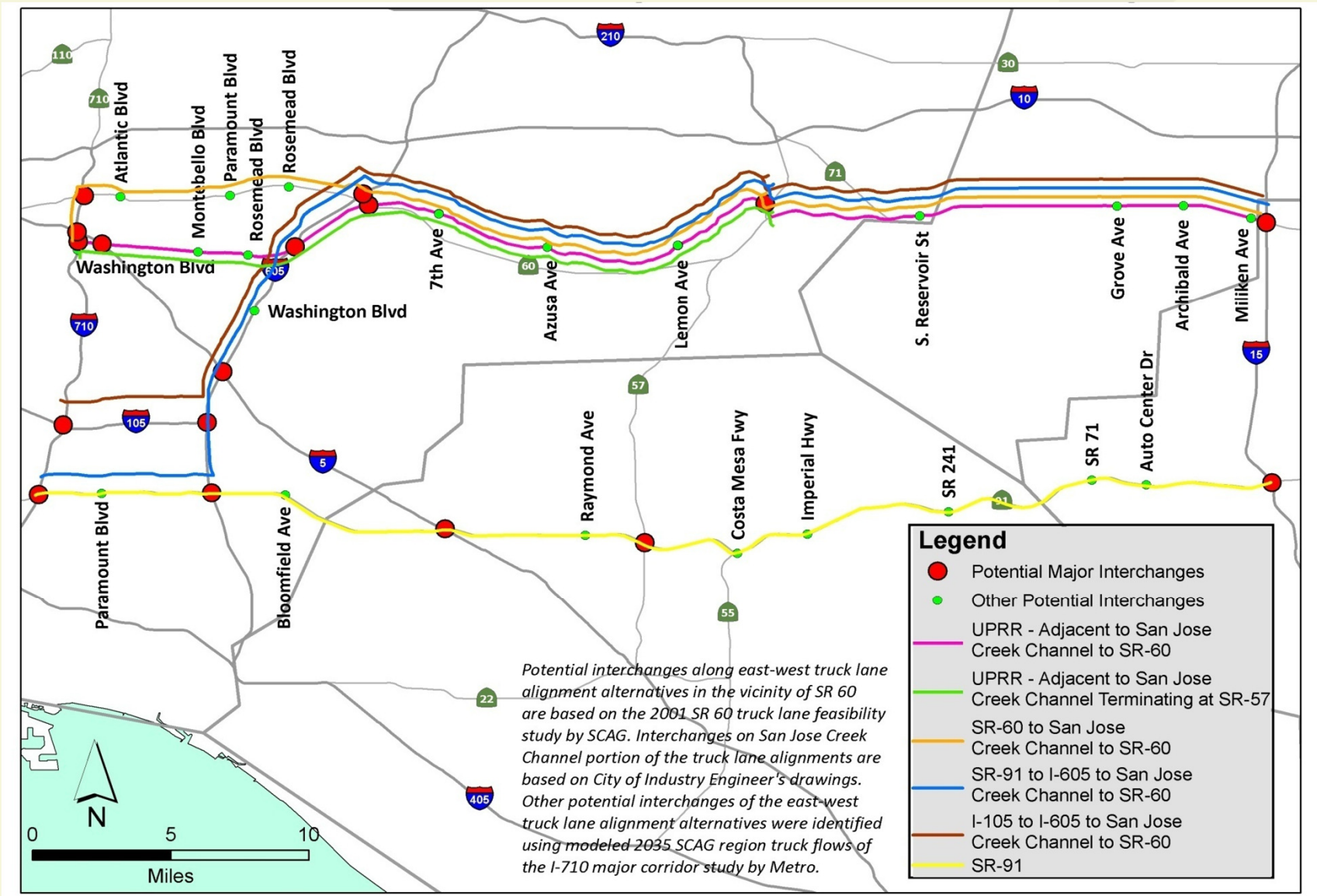


Yellow: Non-residential, land-only impacts that would not require a full parcel take and that would not involve an impact to structures. These kinds of land uses including vacant land, peripheral parking, agricultural land, private (non-residential) landscaping, utility corridor land, etc.



Orange: Non-residential (i.e., commercial or industrial) impacts that would significantly compromise the business use of that parcel and/or that would result in a full parcel take of the business activity, or that would lead to direct impacts to major structures / facilities.

Potential Alignments



Why "Hybrid" Alignments?

Potential to reduce conflicts with ROW proposed for other regional transportation improvements

Minimize impacts to communities – fewer residential or other sensitive land uses along alignments

In some cases (San Jose Creek Channel) majority of land is owned by the public sector (LA County DPW and USACE)

Preliminary "hybrid" alignments under consideration:

- UPRR-adjacent to San Jose Creek
- I-105 to I-605 to San Jose Creek
- SR-91 to I-605 to San Jose Creek

San Jose Creek

- Serves same markets as SR-60/I-10, but with fewer impacts to communities along SR-60 and I-10
- Preserves options for other planned projects in SR-60/I-10 ROW – potential links to SR-60/SR-57/Grand Ave. interchange improvements
- Potential “win-win” leading to needed improvements to flood control channel

Modeled Measures of Effectiveness (MOEs)

Truck Volumes	The volumes of trucks that would be carried by each of the potential alignments in 2035
Delay (All Traffic)	Impact on delay of all traffic within the influence area
Delay (Truck Traffic)	Impact on delay of all heavy-duty truck traffic within the influence area
Impact on Parallel Routes	Effectiveness of each alignment to reduce the truck volumes and congestion on parallel routes

Summary of Assessment

ID	East-West Corridor[1, 2]	Truck Volumes	Delay (All Traffic)	Delay (HH Truck Traffic)	Parallel Routes	Summary/Key Points
1	UPRR -Adjacent to San Jose Creek Channel to SR 60	●	●	●	●	Carries the second highest truck volumes – within 5% of Alt. 5 Reduces truck traffic on SR 60 by 65-85% Shows greatest reduction in total delay for all traffic (-4.3%) in influence area, as well as high reduction (-10%) for heavy-heavy truck delay
2	UPRR –Adjacent to San Jose Creek Channel Terminating at SR 57	◑	◑	◑	○	Results in negative traffic impacts – 18% more traffic on SR 60 east of SR 57. Shows increase in total delay for all traffic (1%) in influence area, as well as medium reduction (-7%) for heavy-heavy truck delay
3	SR -60 to San Jose Creek Channel to SR 60	●	●	●	●	Carries the same truck volumes as Alt. 1 – within 5% of Alt. 5 Reduces truck traffic on SR 60 by 70-85% Shows high reduction in total delay for all traffic (-3.7%) in influence area, as well as high reduction (-9%) for heavy-heavy truck delay
4a	SR 91 to I-605 to San Jose Creek Channel to SR 60	◑	◑	●	●	Carries lower truck volumes than Alt. 1, 3, 4b and 5 Shows greatest heavy-heavy truck delay reduction (-10.9%), but fairly low (-1.3%) overall total delay for all traffic
4b	I-105 to I-605 to San Jose Creek Channel to SR 60	●	◑	●	●	Shows high heavy-heavy truck delay reduction (-10.7%), but fairly low (-1%) total delay for all traffic
5	SR 91	●	◑	●	◑	Carries the most trucks at all screenlines – up to 57,780 (two-way volumes) Has little impact on parallel freeway east of SR 57. Shows high heavy-heavy truck delay reduction (-10.5%), but fairly low (-1%) total delay for all traffic

Summary of Assessment

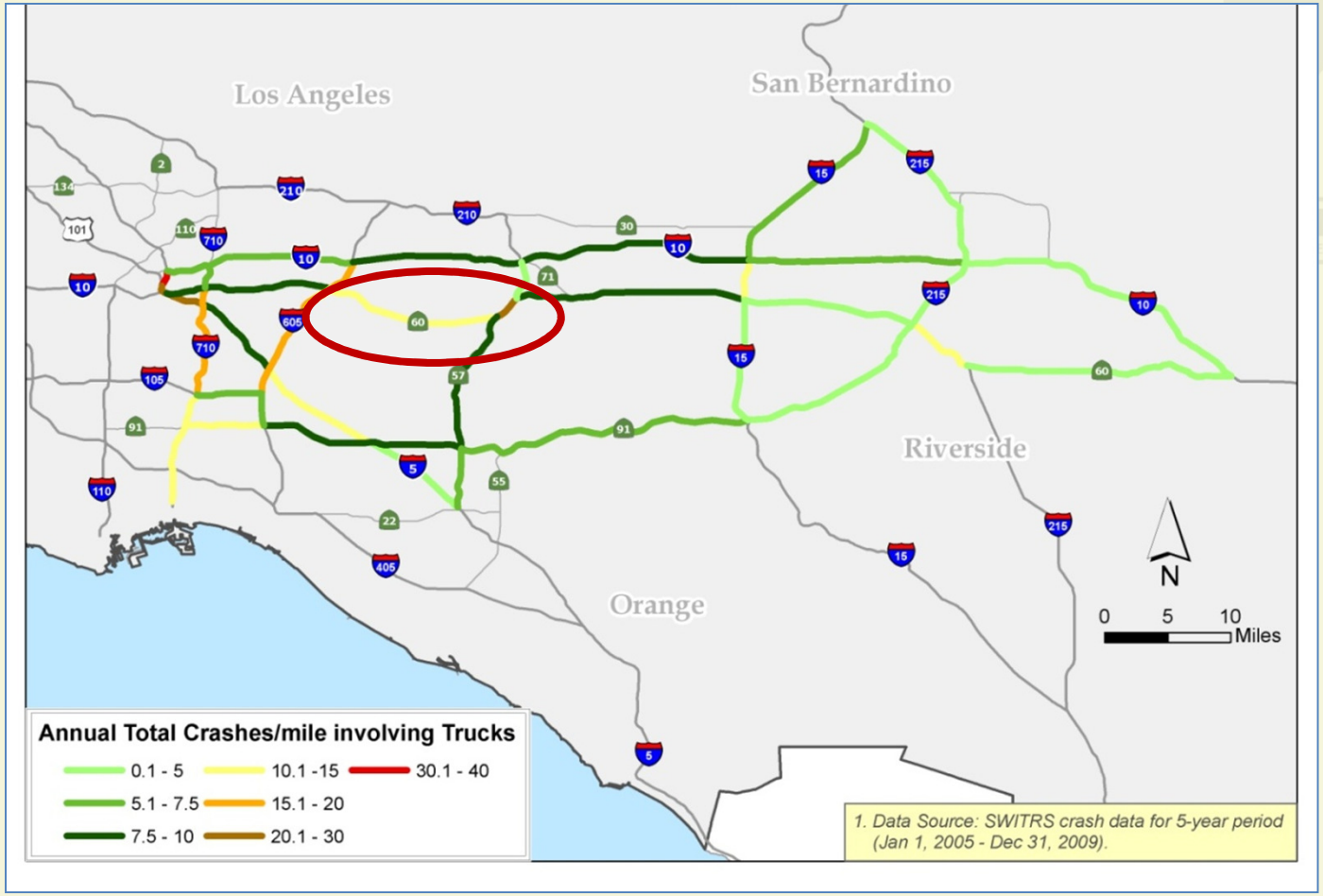
- Consequences of “doing nothing”: high levels of truck traffic on general purpose lanes (more congestion, accidents, constrained economic development)
- Substantial traffic reduction benefits would accrue to the selected corridor and parallel facilities

Doing Nothing: More Truck Traffic

Highway	Truck Counts and 2035 Forecasts (Trucks / Day)				
	To	From	2008 Bi-Directional HDT Volume	2035 Bi-Directional HDT Volume	Change (2008 – 2035)
I-210	I-605	SR-57	19,155	43,089	125%
	SR-57	SR-83	23,269	43,091	85%
SR-60	I-710	I-605	20,315	43,219	113%
	SR-57	SR-71	25,540	43,792	71%
	SR-71	I-15	34,154	55,363	62%
I-10	I-605	SR-57	13,628	34,587	154%
	SR-57	SR-83	23,813	44,212	86%
SR-91	I-710	I-605	17,025	30,873	81%
	SR-57	SR-55	11,988	27,410	129%
	SR-71	I-15	14,963	35,783	139%
I-710	SR-91	I-5	23,850	53,010	122%
	I-5	SR-60	15,804	45,189	186%

- **Highest truck volumes by 2035 are projected on SR-60 (55,363), I-710 (53,010), and I-10 (44,212)**

Doing Nothing: Truck Involved Crashes



- **Worst regional truck incident rates are on SR-60, I-605 and I-710.**

Potential to Incorporate Zero-Emission Goals?

- Fixed guideway systems would lack flexibility needed to serve diverse markets
  - Move towards electrified trucks with or without wayside power
- High power requirements and current limitations of battery technology will limit range of vehicle
  - Advantage of wayside power as range extender and reducing downtime for charging
  - Does not need to be restricted to freight corridors